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Curtis Wong

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AMIN. TUROCY & CALVIN, LLP
24TH FLOOR, NATIONAL CITY CENTER
1900 EAST NINTH STREET
CLEVELAND, OH 44114

EXAMINER

HUYNH, SON P

ART UNIT

PAPER NUMBER

2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/650,375

Applicant(s)

WONG ET AL.

Examiner

Son P. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/05/2006 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-67 have been considered but are moot in view of the new ground(s) of rejection.

Note: US 2005/0028208 (used for the rejection below) comprises all subject matters disclosed in WO 00/04709 (used in the Examiner Answer dated 11/03/2006).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-23, 46, 50, 51, 58, 59, 67 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 15-23 recite "a computer-readable medium having computer executable components" is directed to functional descriptive materials.

Claims 50, 58, 67 recites "a computer-readable medium having computer-executable instructions for performing" is directed to functional descriptive materials.

Pages 52- 53 of the guideline states that "computer readable medium encoded with a computer program...is thus statutory". The "computer-readable medium having computer executable components" as claimed in claims 15-23 or "computer readable medium having computer executable instructions for performing..." in as claimed in claims 50, 58, or claim 67, does not necessarily define structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Thus, it is not statutory.

The limitation "computer-readable medium having computer executable instructions for performing the steps of" should be replaced as – a computer-readable medium encoded

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with computer executable instructions being executed by a processor for performing the steps of—

Claims 46, 51, 59 are directed to a method in the abstract as evidenced by claims 50, 58, 67 respectively. Therefore, it is not a practical application that produces useful and tangible result. Thus, they are not statutory.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11, 15-21, 24-25, 27-36, 38-67 rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US 2005/0028208 A1 –hereinafter referred to as E208) in view of Arsenault et al. (US 6,701,528 B1).

Note: US 2003/0179988 A1 is continuation of application No. 09/322,244, incorporated by reference in its entirety, and US 2005/0204388 A1 is continuation of application No. 09/330,792 which is also incorporated by reference in its entirety in E208 – see paragraphs 0127-0128.

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Regarding claim 1, E208 discloses main facility 12 or television distribution facility 16 stores a plurality of program guide information in a program guide server (figures 1-2d). The program guide information includes television program listings data (e.g., program times, channels, titles, and descriptions) and other program guide data for additional services other than television program listings (e.g., pay per view information, weather information, associated internet web link, computer software, etc. – paragraphs 0067). The main facility and/or television distribution facility is programmed to provide the program guide information to remote program guide access device and user television equipment 22 based on received selection criteria (program guide feature) such as list of favorite programs, parental control features, schedule program recording feature, etc. (including, but are not limited to, paragraphs 0069-0072, 0097, 0101, 0103, 0108-0112, 0117-0118, 0126-0127, 0220, figures 2c-2d). Thus, the limitation “server computer storing a plurality of tokens, each token having a system unique identifier for identifying a predetermined at least one of an audio and visual program” is met by television distribution facility or user television equipment storing program guide features/information, each program guide feature having a system unique identifier such as program channel, program description, program title, time, etc. for identifying a program as a favorite program, as program selected to be recorded, as program selected to be listed, etc. (figures 7-11) ; the “remote computer” as claimed is met remote program guide access device 24, wherein the “token” as claimed is met by the program guide information/feature including program title, channel, program identifier, or time, or description, etc; the claimed limitation “wherein the server is programmed to

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provide at least one token to a remote computer based on received selection criteria" is met by the television facility (16) and/or user equipment (22) is programmed to provide program guide feature (providing program channel, title, time, etc. in program listings, information of favorite program, program to be recorded, reminder, etc.) based on selection criteria received from the user (i.e. via link 19 – see including, but are not limited to, paragraphs 0110, 0120-0126).

E208 further discloses schedule to record program series with plurality of episodes (see paragraph 0128), the at least one of an audio and video program formed of at least two program segments (e.g. 15 minutes segments of program – see incorporated by reference 2003/0149988 A1, paragraphs 0094-0096, 0165, figures 25a-25b). However, E208 does not explicitly disclose the at least two program segments each associated with a disparate token.

Arsenault discloses dividing the program into multiple segments and transmitted in multiple channels. The received segments are then spliced to the pre-stored segment and to each other to give the appearance of VOD playback. MPEG data embedded in the SMPTE time code or the presentation time stamp information allows the IRD to perform MPEG on line editing to reassemble the program into a single filestream... Each sub-segment can be assembled by sorting by a channel identifier (such as the SCID), and sorting the assembled sub-segments in accordance with a time code... (see include, but is not limited to, col. 2, lines 22-41, col. 8, lines 29-51, col. 9, lines 50-60, col. 12, line 1-20, col. 15, line 56-col. 16, line 5). Thus, Arsenault discloses at least one

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of an audio and visual program formed of at least two program segments, the at least two program segments each associated with a disparate token is read on the video program is formed of multiple program segments, each segments associated with a different channel identifier (SCID), or time code, or time stamp). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify E208 to incorporate the teaching as taught by Arsenault in order to minimize latencies between the user and the video server (col. 1, lines 41-60).

Regarding claim 2, E208 further teaches the server is programmed to transmit a message to the remote computer based on the selection criteria, the message including the at least one token (e.g., the television distribution facility sends a message to remote program guide access device 24 based on a selection criteria such as recording information, status information, message information, audio and video, etc. paragraphs 0103-0104; the message include program guide information/program guide feature including program title, channel, time, etc. – see including, but are not limited to, paragraphs 0106-0107, 0119).

Regarding claim 3, E208 further teaches the message is a text email message, the token being operatively associated with the email message (the program guide data/program guide feature and other information may, for example, be encapsulated into e-mail messages – see including, but are not limited to, paragraphs 0106-0107, 0119, 0139).

Regarding claim 4, E208 further teaches the token (program guide information/program guide feature) is an attachment to the email message (see including, but are not limited to, paragraphs 106-107, 119, 139).

Regarding claim 5, E208 further teaches the server computer is programmed to store corresponding program data as an attribute of each token, the server providing corresponding program data with each token (main facility or television distribution facility or user equipment is programmed to store programs and program data corresponding to program guide information/program guide feature, the main facility or television distribution facility or user equipment provides corresponding program and program data with each program guide information/program guide feature including channel, title, etc. see including, but are not limited to, paragraphs 0110, 0115).

Regarding claim 6, E208 additionally teaches a program database is stored at the server computer, the program database including the plurality of tokens identifying a plurality of at least one of audio and visual programs (program guide server, which is located either at distribution facility or main facility, or user equipment stores program guide information/program guide feature and program data – paragraph 0073). The program guide information/program guide feature may includes television program listing such as program times, channels, titles, and descriptions, etc. paragraph 0067, figure 8).

Regarding claim 7, E208 also discloses program guide server 25 may, for example, generate program guide display screens as digital frames and distribute the frames to user television equipment 22 for display by an interactive program guide client implemented on user television equipment 22. Program guide server 25 may run a suitable database engine, such a SQL server, and provide program guide data in response to queries generated by user television equipment 22 or remote program guide access device 24 (paragraph 0073). In response to user selection on program guide display screen to select a particular program to record, the server is programmed to record the selected program on predetermined digital or analog storage device (figures 2c-5, 19 and paragraphs 0163-0164). Inherently, in response to a translation request (request for program guide display screen), the server is programmed to translate a token into a usable format (generate program guide display screens suitable to display) for programming a recording system to record a predetermined at least one of audio and visual program in a tuning space (storage device, channel) associated with the recording system.

Regarding claim 8, E208 teaches select tuning space based on identifying data provided with the translation request (figures 10-11).

Regarding claim 9, E208 discloses the server provided to selected program to a predetermined storage device selected by the user (see include, but is not limited to,

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figures 11, 19 and paragraphs 0163-0164). Inherently, the server stores a unique identifier for each recoding system registered with the server, each unique identifier being associated with tuning space information for each respective recording system so that the server is able to provide selected program to predetermined recording system.

Regarding claim 10, E208 teaches the useable format includes programming data identifying at least two of date, channel, time, duration associated with each token provided with the translation request (see include, but is not limited to, figures 10-11).

Regarding claim 11, E208 discloses program guide information is stored in television program guide equipment 17 (paragraph 0073, figures 2c, 2d). Appropriate commands, requests, or other communications may be transmitted by remote program guide access device 24 for processing by program guide server 25. If any changes to program guide settings are made (e.g., change to the parental control setting), program guide server may, for example, update a local program guide client running on user television equipment 22 with necessarily information (paragraph 0075). Inherently, the server is programmed to store plurality of tokens (program guide information/program guide feature) as part of a programmable database (e.g., local program guide), the server updating the programmable database in response to receiving an update request at the server (e.g. changes to program guide setting are made).

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Regarding claim 15, E208 discloses a token database component (program guide server 25 or storage that stores local program guide information – see include, but is not limited to, paragraphs 0081-0084) for storing tokens (program guide information/program guide feature), each token representing a different one of at least one of an audio and visual program (program guide feature comprises program times, titles, channels, description, etc. – paragraph 0067, figure 8); and

a message component (communication device 27 – figure 2d) with which at least one token is transmitted in response to a request for the at least one token (paragraphs 0081-0083). It would have been obvious that computer executable components are provided in order that a processor could automatically perform the instructions.

Regarding claim 16, E208 discloses a user interface component (display 148 – figure 7) for receiving selection criteria having program characteristic (program times, title, channel, etc. figure 7) indicative of at least one of an audio and visual program. It would have been obvious that computer executable components are provided in order that a processor could automatically perform the instructions

Regarding claim 17, E208 discloses the program guide information is organized different category. In response to user selection of a particular category, only program guide information associated with the selected category is displayed (see include, but is not limited to, paragraphs 0108-0112). Inherently, a search component is comprised for locating at least one token (program guide information/program guide feature) from the

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token database component (e.g., program guide server or storage device that stores program guide information in user equipment or storage 56) based on selection criteria. It would have been obvious that computer executable components are provided in order that a processor could automatically perform the instructions.

Regarding claim 18, E208 discloses program database component (program guide server 25, storage 56, storage device 31, 32 – figures 2c-5) that includes the token database component (program guide information/program guide feature – paragraphs 0098-0099), the program database component associating at least one attribute with each token (e.g. program guide feature including program times, titles, etc.) the at least one attribute being provided with the at least one token (program guide feature including program times, titles, etc. being provided with program guide information – paragraph 0067, figure 8). It would have been obvious that computer executable components are provided in order that a processor could automatically perform the instructions.

Regarding claims 19-20, the limitations as claimed are directed toward embodying the system of claims 7-8 in “computer readable medium”. It would have been obvious to embody the procedures of E208 in view of Arsenault discussed with respect to claims 7-8 in a “computer readable medium” in order that the instructions could be automatically performed by a processor.

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Regarding claim 21, E208 discloses if any changes to program guide settings are made, the program guide server may, for example, update a local program guide client running on user television equipment 22 with the necessarily information (see including, but is are not limited to, paragraph 0075). It would have been obvious that the token database component (program guide server) comprises computer executable component for updating in order that a processor could automatically perform the instructions.

Regarding claim 24, E208 teaches a system for providing program criteria comprising:

means for storing token data representing a plurality of audio and/or visual programs (program guide server 25 stores program guide information/program guide feature representing a plurality of television programs- see including, but are not limited to, paragraphs 0067, 0073);

means (program guide distribution equipment 21 or internet service system 61, figure 2c, figure 6a) for providing selected token data in response to a query identifying program selection criteria – see including, but are not limited to, paragraphs 0110, 0124-0126).

E208 further discloses schedule to record program series with plurality of episodes (see paragraph 0128), the at least one of an audio and video program formed of at least two program segments (e.g. 15 minutes segments of program – see incorporated by reference 2003/0149988 A1, paragraphs 0094-0096, 0165, figures 25a-25b). However, E208 does not explicitly disclose means for selectively combining at

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least two program segments of one of the plurality of audio and/or visual program based at least in part upon characteristic of a client system.

Arsenault discloses dividing the program into multiple segments and transmitted in multiple channels. The received segments are then spliced to the pre-stored segment and to each other to give the appearance of VOD playback. MPEG data embedded in the SMPTE time code or the presentation time stamp information allows the IRD to perform MPEG on line editing to reassemble the program into a single filestream... Each sub-segment can be assembled by sorting by a channel identifier (such as the SCID), and sorting the assembled sub-segments in accordance with a time code... (see include, but is not limited to, col. 2, lines 22-41, col. 8, lines 29-51, col. 9, lines 50-60, col. 12, line 1-20, col. 15, line 56-col. 16, line 5, figures 2, 5, 7a-7b). Thus, Arsenault discloses means for selectively combining at least two program segments of one of the plurality of audio and/or visual program based at least in part upon viewing characteristics of a client system (e.g. device in the IRD that splices the received segments to reassemble the video program for playback based on user selection to demand playback of the video program – see discussed above, and col. 2, lines 22-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify E208 to incorporate the teaching as taught by Arsenault in order to minimize latencies between the user and the video server (col. 1, lines 41-60).

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Regarding claim 25, E208 teaches means for updating the token storing means in response to an update request (user accesses a suitable web page provided by Internet service system 61 that allow the user to enter a password and adjust the program guide parental control settings feature- see include, but is not limited to, paragraph 0099).

Regarding claim 27, E208 discloses the program guide server generates program guide display screens as digital frames and distribute the frames to user television equipment 22 for display by an interactive program guide client implemented on user television equipment 22 (paragraph 0073). The server provides selected program to predetermined system in response to user selection of a particular icon on the screens (figure 19). Inherently, the system includes means (program guide server) for translating a token into a useable format (program guide display screen format) for programming a remote recording system to record a predetermined at least one of an audio and visual program (selected program) in a tuning space (storage device, tune channel) associated with the recording system.

Regarding claims 28-29, the limitations correspond to the limitations as claimed in claims 2-3 respectively, and are analyzed as discussed with respect to the rejection of claims 2-3.

Regarding claim 30, E208 teaches a method for providing program criteria to facilitate programming of a recording system, the method comprising:

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sending a token (program guide information/program guide feature – page 9, lines 15-30, figure 8) from one computer (main facility 12 or distribution facility 16 – figures 1-2d) to another computer (user equipment 22 or remote program guide access device 24 – figures 1-2d) based on selection criteria received at the one computer (page 12, line 30- page 13, line 9, page 16, lines 3-10, page 31, lines 7-31), the token representing a specific at least one of audio and visual program (program guide feature including program times, channels, titles, etc. – page 9, lines 15-30, figure 8).

E208 further discloses schedule to record program series with plurality of episodes (see paragraph 0128), the at least one of an audio and video program formed of at least two program segments (e.g. 15 minutes segments of program – see incorporated by reference 2003/0149988 A1, paragraphs 0094-0096, 0165, figures 25a- 25b). However, E208 does not explicitly disclose selectively combining at least two program segments of one of the plurality of audio and/or visual programs based at least in part upon viewing characteristics of a client system.

Arsenault discloses dividing the program into multiple segments and transmitted in multiple channels. The received segments are then spliced to the pre-stored segment and to each other to give the appearance of VOD playback. MPEG data embedded in the SMPTE time code or the presentation time stamp information allows the IRD to perform MPEG on line editing to reassemble the program into a single filestream... Each sub-segment can be assembled by sorting by a channel identifier (such as the SCID), and sorting the assembled sub-segments in accordance with a time code... (see

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include, but is not limited to, col. 2, lines 22-41, col. 8, lines 29-51, col. 9, lines 50-60, col. 12, line 1-20, col. 15, line 56-col. 16, line 5). Thus, the limitation of “selectively combining at least two program segments of one of the plurality of audio and/or visual programs based at least in part upon viewing characteristics of a client system” is interpreted as selectivity splicing the segments of video program once the user of the client system demands for playback – col. 2, lines 21-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify E208 to incorporate the teaching as taught by Arsenault in order to minimize latencies between the user and the video server (col. 1, lines 41-60).

Regarding claim 31, E208 discloses the program guide information is organized different category. In response to user selection of a particular category, only program guide information/program guide feature associated with the selected category is displayed/performed (paragraph 0112). Inherently, a program database is searched for the token based on the selection criteria so that the program information is displayed in organization criteria (e.g. time, theme, etc.).

Regarding claim 32, E208 teaches a method for providing program criteria to facilitate programming of a recording system, the method comprising:

storing a plurality of tokens in a database at a first computer (server 25), each token identifying at least one of an audio and visual program (storing a plurality of program guide information/program guide feature in program guide server 25 at

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distribution facility, each program guide information/feature comprises program times, titles, channels, etc. paragraph 0067, figures 2c-2d);

receiving selection criteria from a second computer (e.g. receiving a selection to display program guide listing from user equipment 22 or remote program guide access device 24 – paragraphs 0073, 0110);

selecting at least one token based on the selection criteria (selection at least one program guide data/program guide feature based on the selection of displaying program guide listings – paragraph 0108-0112); and

sending a message to a remote computer, the message having the selected at least one token associated with the message (e.g. sending a message to user equipment 22 to command the user equipment to record a particular program one digital storage device 31 or secondary storage device 32 or sending a message to remote program guide access device 24– paragraphs 0139, 0163-0164). Inherently, the message includes a token that identifies the function and information of the particular program so that the selected program is identified and recorded).

E208 further discloses schedule to record program series with plurality of episodes (see paragraph 0128), the at least one of an audio and video program formed of at least two program segments (e.g. 15 minutes segments of program – see incorporated by reference 2003/0149988 A1, paragraphs 0094-0096, 0165, figures 25a-25b). However, E208 does not explicitly disclose each token identifying one of at least two segments that form at least one of an audio and visual program.

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Arsenault discloses dividing the program into multiple segments and transmitted in multiple channels. The received segments are then spliced to the pre-stored segment and to each other to give the appearance of VOD playback. MPEG data embedded in the SMPTE time code or the presentation time stamp information allows the IRD to perform MPEG on line editing to reassemble the program into a single filestream... Each sub-segment can be assembled by sorting by a channel identifier (such as the SCID), and sorting the assembled sub-segments in accordance with a time code... (see include, but is not limited to, col. 2, lines 22-41, col. 8, lines 29-51, col. 9, lines 50-60, col. 12, line 1-20, col. 15, line 56-col. 16, line 5). Thus, Arsenault discloses each token identifying one of at least two program segments that form at least an audio and visual program (each time code, time stamp, or SCID, or channel identifier identifying one of the segment for splicing to form the video program for playing back – see col. 2, lines 22-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify E208 to incorporate the teaching as taught by Arsenault in order to minimize latencies between the user and the video server (col. 1, lines 41-60).

Regarding claim 33, the additional limitations as claimed correspond to the additional limitations in claim 31, and are analyzed as discussed with respect to the rejection of claim 31.

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Regarding claim 34, E208 discloses the program may be recorded on digital storage device 31, on secondary storage device 32, or on program guide server 25 of the distribution facility 16, or on storage 56 of the remote program guide access device 24 according to the command (see include, but is not limited to, paragraphs 0163-0164). Inherently, the message is sent based on address data provided by the second computer (22, 24), the remote computer (e.g. user equipment 22) is different from the second computer (e.g. 24 – figures 2d, 3, 6a).

Regarding claim 35, E208 discloses the selected criteria can be sent to and displayed on remote program guide access device 24 or user equipment 32 in response to a selection from remote program guide access device 24 or user equipment 32 (paragraph 0108-0112). Thus, the remote computer (e.g. 22, 24) and the second computer (e.g. 22, 24) are the same.

Regarding claim 36, E208 further teaches updating the database at the first computer in response to an update requested received at the first computer (paragraph 0075, 0099).

Regarding claim 38, the limitations of the method as claimed correspond to the limitations of the system as claimed in claim 7, and are analyzed as discussed with respect to the rejection of claim 7.

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Regarding claim 39, E208 further teaches the message is a text email message, the selected token being operatively associated with the email message (the program guide data/program guide feature and other information may, for example, be encapsulated into e-mail messages – paragraphs 0106, 0119, 0156, 0180, 0228).

Regarding claim 40, E208 discloses a system to facilitate remote programming of a recording system, comprising:

television distribution facility 16 receives information indicating the user who scheduled a program for recording and storing this information in the program guide- paragraphs 0127. Television distribution facility 16 also receives a request for a particular program to be recorded in a particular storage device (25,31,32, or 56). In response to the request, the selected program is recorded in the predetermined storage device (paragraphs 0127, 0163-0164, 0220-0222, figure 19). Inherently, the server (distribution facility 16) operable to receive a token (program guide information/feature) having data identifying at least one of a user (who schedule a program to be recorded) and a recording system (storage device used to record the program) and identifying at least one of an audio and visual program (identifying program to be recorded), the server being operable to communicate program data, based on the token, to a programmable recording system to effect programming of the recording system to record the at least one of the audio and visual program (communicate program data/program guide feature to storage device used to record the selected program).

E208 further discloses schedule to record program series with plurality of episodes (see paragraph 0128), the at least one of an audio and video program formed of at least two program segments (e.g. 15 minutes segments of program – see incorporated by reference 2003/0149988 A1, paragraphs 0094-0096, 0165, figures 25a-25b). However, E208 does not explicitly disclose identifying at least one of two program segments that form one of an audio and visual program.

Arsenault discloses dividing the program into multiple segments and transmitted in multiple channels. The received segments are then spliced to the pre-stored segment and to each other to give the appearance of VOD playback. MPEG data embedded in the SMPTE time code or the presentation time stamp information allows the IRD to perform MPEG on line editing to reassemble the program into a single filestream... Each sub-segment can be assembled by sorting by a channel identifier (such as the SCID), and sorting the assembled sub-segments in accordance with a time code... (see include, but is not limited to, col. 2, lines 22-41, col. 8, lines 29-51, col. 9, lines 50-60, col. 12, line 1-20, col. 15, line 56-col. 16, line 5). Thus, Arsenault discloses identifying at least one of two program segments that form one of an audio and visual program (e.g. identifying SCID, channel identifier, time code, or time stamp of the segments of the video program for splicing to reassemble the video program for playback). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify E208 to incorporate the teaching as taught by Arsenault in order to minimize latencies between the user and the video server (col. 1, lines 41-60).

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Regarding claim 41, E208 further teaches the server (16) is a first server, the token being provided as a request from a second server (user equipment 22 or remote program guide access device 24 – see include, but is not limited to, paragraph 0127, 0134, 0219-0222) in response to a user selection associated with the at least one of an audio and visual program.

Regarding claim 42, E208 teaches a system to facilitate remote programming of a recording system, comprising:

a first server (e.g. remote program guide access device 24 – figures 2c-2d, 5) operable to receive data indicative of a user selection (via user interface 52-figure 5), the first server providing a request to a second server (distribution facility 16 – figures 2c, 2d), the request having data identifying at least one of an audio and visual program selected by the user (identification of program selected to be recorded –see include, but is not limited to, paragraphs 0127, 0134) and data identifying at least one of the user (user who schedules a program for recording – paragraph 0127) and a recording system (identification of storage device used to record to the selected program – paragraphs 0127, 0134, 0219-0222).

the new added limitation “... at least two program segments....” correspond to the new added limitation in claim 1, and is analyzed as discussed in the rejection of claim 1.

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Regarding claim 43, E208 teaches the second server (16) is operable to communicate program data, based on the request, to a programmable recording system to effect programming of the recording system to record the at least one of an audio and visual program (distribution facility 16, in response to the request, provides the data of the selected program to a selected storage device for recording – see include, but is not limited to, paragraph 0127).

Regarding claim 44, E208 discloses a user interface (10- figure 1) to facilitate remote programming of a recording system, comprises a main facility 12 for providing plurality of programs and program guide information associated with the plurality of programs to the distribution facility 16. The distribution facility 16 receives program guide information, stored them and provides them to user equipment 22 or remote program guide access device 24. The program guide information is displayed on a display of television 16 at user equipment 22 or on a display of remote program guide access device 24. In response to a user selection of specific program on the display of the remote program guide access device 24 to be recorded, a request is sent to distribution facility 16. Distribution facility 16 processes the request and provide the selected program to a particular storage device used to record the selected program (figures 2c-2d, 3, 5, 7-8, 19 and paragraph 108-112). Inherently, the user interface comprising: a selectable display portion (program guide listing) associated with at least one of an audio and a visual program; and

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a process (e.g. distribution facility 16 or set top box 28 – figure 3) associated with the display portion to effect programming of a recording system (storage device 25, 31, 32, or 56 – figures 2c, 3, 5) to record the at least one of an audio and visual program in response to selection of the display portion, wherein the process is resident at a server operable to communicate program data to the recording system based on the selection to effect programming of the recording system (figure 2c, 3).

the limitation “...at least two program segments...” corresponds to the limitation “...the at least one of and audio and visual program formed of at least two program segments...”, and is analyzed as discussed in the rejection of claim 1.

Regarding claim 45, E208 discloses the interactive program guide data may comprises program listings data and other program guide data for additional services other than television program listings; such as weather information, etc. (paragraph 0067). E208 further discloses the user can schedule a program for recording (see include, but is not limited to, paragraph 0110, 0127, 0137, 0219-0222). Inherently, the program data includes local scheduling data programming the recording system in a local tuning space associated with the recording system (e.g. user schedules time interval, title, channel of program to be recorded in a specific storage device).

Regarding claim 46, E208 teaches a method comprising:

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receiving program content criteria from a user via a communication link (receiving user selection of a content criteria from a user via communication link 19- figures 2c, 2d, page 12, line 30-page 13, line 9, page 31, lines 7-31);

selecting program content based on the program content criteria received from the user (select program to be recorded based on the requested received from the user – page 54, line 28-page 55, line 24 figure 19);

transmitting programming component identifying the selected program content, the programming component being operable to effect recording of a program corresponding to the program content (transmitting selected program to a specified storage device for recording – page 55, lines 2-24).

the new added limitation “selectively combining...” correspond to the new added limitation in claim 24, and is analyzed as discussed in the rejection of claim 24.

Regarding claim 47, E208 further teaches the programming component is transmitted to a computer associated with the user (e.g., remote program guide access device 24 – paragraphs 0127, 0134, 0219-0222).

Regarding claim 48, E208 also teaches the program component is transmitted to a recording system (31, 32 – paragraph 0127, 0134, 0219-0222).

Regarding claim 49, Ellis teaches the program component is transmitted to a server (25 – see include, but is not limited to, paragraphs 0127, 0134, figures 2a-2d).

Regarding claim 51, E208 teaches a method comprising:

transmitting for display on a remote computer information about at least one of audio and visual content (transmitting program guide information/program guide feature to user equipment 22 or remote program guide access device 24 – figures 2c-2d and paragraphs 0073, 0100-0101);

receiving from the user computer a selection of the content (paragraphs 0108-0112, 0127);

transmitting a programming component identifying the selected content, the programming component being operable to effect recording of a program corresponding to the program content (paragraphs 0127, 0134).

the new added limitation “the selection comprising combining...” correspond to the new added limitation in claim 46, and is analyzed as discussed in the rejection of claim 46.

Regarding claim 52, E208 teaches the programming component is transmitted to the remote computer (24 comprises storage 56 for storing program component received from the distribution facility 16 – see include, but is not limited to, paragraph 0127).

Regarding claims 53-54, the limitations as claimed correspond to the limitations as claimed in claims 48-49, and are analyzed as discussed with respect to the rejection of claims 48-49.

Regarding claim 55, E208 discloses the information indicating the user who scheduled a program for recording, may also be recorded by the program guide or remote program guide access device (see include, but is not limited to, paragraphs 0127, 0134).

Inherently, information identifying the user is received.

Regarding claim 56, E208 discloses the selected program may be stored on secondary storage device 32, digital storage device 31, on storage device 56 of remote program guide access device 24 (paragraphs 0127, 0163-0164, 0219-0220). Inherently, information identifying a device associated with the user is received so that the selected program is stored in a predetermined storage device.

Regarding claim 57, E208 discloses the program listing information includes program channels (paragraph 0067). The remote program guide may respond to the command by sending one or more access communications to the local interactive program guide implemented in equipment 17 with the remote program guide access device 24 to record the program associated with the selected listing when the program is aired. The program may be recorded on storage device 32, digital storage device 31 or on storage 56 of remote program guide access device (see include, but is not limited to, paragraph 0127). Inherently, the information identifying a local tuning space (e.g. program channel), system configuration for a device (for example, set control circuitry 42 to a specific channel) is also received.

Regarding claim 59, Ellis teaches a method comprising:

storing programming information (paragraphs 0082-0085);

receiving from a computer user information (who set a reminder, who scheduled program for recording, etc. 0108-0127) and information describing at least one of audio and visual content (e.g. program times, tiles, etc. of program to be recorded – paragraphs 0099-100);

using the stored programming information and the user information to construct a token that includes information sufficient to program a recording system to record the at least of audio and visual content (using the program guide information/program guide feature and user information to construct a recording request that allow the recording system to record a program into specific storage device- see include, but is not limited to, paragraphs 0099-100);

transmitting the token (e.g. program guide feature comprising recording request) via a communication link (19 – paragraphs 0110-0112, 0127).

new added limitation correspond to the new added limitation in claim 1, and is analyzed as discussed in the rejection of claim 1.

Regarding claim 60, E208 teaches the computer is a remote computer (paragraph 0092);

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Regarding claim 61, E208 teaches the remote computer is a portable computer (paragraph 0092).

Regarding claim 62, E208 teaches the computer is a server (figure 2c, 2d).

Regarding claim 63, E208 teaches the user information includes information identifying characteristic of a device associated with the user (VCR, DVD, set top box with cable modem – figure 11).

Regarding claim 64, E208 teaches transmitting includes transmitting the token to the computer (transmitting program guide feature including recording command to the user equipment 22 or remote program guide access device 24 for recording the selected program— see include, but is not limited to, paragraphs 0163-0164, 0219-0222).

Regarding claim 65, E208 teaches transmitting the token to a recording system (e.g. storage device 31, 32 – paragraphs 0163-0164, 0219-0222).

Regarding claim 66, E208 teaches transmitting the token to a server (e.g. transmitting program guide information/program guide feature to program guide equipment 17 – see include, but is not limited to, paragraphs 0110, 0163-0164).

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Regarding claims 50,58,67, the limitations as claimed are directed toward embodying the method of claims 46, 51, 59 in "computer readable medium". It would have been obvious to embody the procedures of E208 in view of Arsenault discussed with respect to claims 46, 51, 59 in a "computer readable medium" in order that the instructions could be automatically performed by a processor.

6. Claims 12-14, 22-23, 26, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over E208 in view of Arsenault as applied to claim 11, 15, 25, or 36 above, and further in view of Knudson et al. (US 6,536,041).

Regarding claim 12, E208 in view of Arsenault teaches a system as discussed in the rejection of claim 11. E208 further discloses program guide data may be provided by television distribution facility 16 to user television equipment 22 in a continuous stream or may be transmitted at a suitable time interval (paragraphs 0070-0071). However, E208 in view of Arsenault does not specifically disclose notify the remote computer in response to receiving an update request that modifies program criteria for a program represented by the at least one token.

Knudson discloses television distribution facility 26 receives program guide data and real time data from sources 22 and 30, and stores the data into database 57 (col. 6, line 45-col. 7, line 27). The program guide data and real time data is displayed on the screen to user in response to user selection (col. 7, lines 47-63). The program guide

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data may be distributed to set top box 52 (via facility 26) periodically and stored in database 53. The program guide information includes real time data such as sports scores for games that have recently concluded (col. 7, lines 10-67 and figure 7). Thus, the server is programmed to notify the remote computer in response to receiving an update request that modifies program criteria for a program represented by the at least one token (providing recently program guide data and real time data to the display at the user equipment). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify E208 in view of Arsenault to use the teaching as taught by Knudson in order to provide update information to user thereby improve quality of services.

Regarding claim 13, Knudson further teaches the server (facility 26- figure 1) stores a different identifiable characteristic for each token obtained from the server (facility 26 stores program channels, times, title, etc. in database 57 – figure 1 and col. 6, line 10-col. 7, line 27), the server employing an identifiable characteristic to notify the remote computer of changes in program criteria for a program represented by the at least one token (facility 26 provides update program guide data and update real time such as changes in sport scores, delay game, etc. to the user equipment for display – col. 6, line 10-col. 7, line 67).

Regarding claim 14, Knudson further teaches the server is program to provide at least one of a token and updated programming data to the remote computer in response to

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receiving an update request that modifies program criteria for a program represented by the at least one token previously provided to the remote computer (facility 26 provides program guide data (titles, channels, etc.) and updated programming data (e.g. sports scores, real time games statistics, game delay information, etc. – col. 6, line 10-col. 7, line 67).

Regarding claims 22-23, the limitations as claimed are directed toward embodying the system of claims 12, 14 in “computer readable medium”. It would have been obvious to embody the procedures of E208 in view of Arsenault and Knudson discussed with respect to claims 12, 14 in a “computer readable medium” in order that the instructions could be automatically performed by a processor.

Regarding claim 26, the limitations correspond to the limitations of claim 14, and are analyzed as discussed with respect to the rejection of claim 14.

Regarding claim 37, the limitations of the method as claimed correspond to the limitations of the system as claimed in claim 26 and are analyzed as discussed with respect to the rejection of claim 26.

Conclusion

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kermode et al. (US 6,018,359) discloses system and method for multicast video on demand delivery system.

Russo (US 6,025,868) discloses stored program pay per play.

Ngo et al. (US 7,155,735) discloses system and method for the broadcast dissemination of time ordered data.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 9:00 - 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Son P. Huynh

February 12, 2007

A handwritten signature in black ink, appearing to read 'Son P. Huynh', with a long horizontal line extending from the end of the signature.